

Blum Robert I
 Form 4
 December 19, 2006

FORM 4 UNITED STATES SECURITIES AND EXCHANGE COMMISSION
 Washington, D.C. 20549

OMB APPROVAL

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STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP OF SECURITIES

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934, Section 17(a) of the Public Utility Holding Company Act of 1935 or Section 30(h) of the Investment Company Act of 1940

(Print or Type Responses)

1. Name and Address of Reporting Person *
 Blum Robert I

2. Issuer Name and Ticker or Trading Symbol
 CYTOKINETICS INC [CYTK]

5. Relationship of Reporting Person(s) to Issuer

(Check all applicable)

(Last) (First) (Middle)
 280 EAST GRAND AVENUE

3. Date of Earliest Transaction (Month/Day/Year)
 12/15/2006

____ Director _____ 10% Owner
 Officer (give title below) _____ Other (specify below)
 President

(Street)
 SOUTH SAN FRANCISCO, CA 94080

4. If Amendment, Date Original Filed(Month/Day/Year)

6. Individual or Joint/Group Filing(Check Applicable Line)
 Form filed by One Reporting Person
 ____ Form filed by More than One Reporting Person

(City) (State) (Zip)

Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned

| 1. Title of Security (Instr. 3) | 2. Transaction Date (Month/Day/Year) | 2A. Deemed Execution Date, if any (Month/Day/Year) | 3. Transaction Code (Instr. 8) | 4. Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5) | 5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4) | 6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 7. Nature of Ownership (Instr. 4) |
|---------------------------------|--------------------------------------|--|--------------------------------|---|---|--|-----------------------------------|
| | | | Code | V Amount (A) or (D) Price | | | |
| Common Stock | 12/15/2006 | | M ⁽¹⁾ | 5,000 A \$ 0.58 | 70,000 | D | |
| Common Stock | 12/15/2006 | | S ⁽²⁾ | 5,000 D \$ 6.94 | 65,000 | D | |
| Common Stock | | | | | 12,500 | I | by Trust 1 ⁽³⁾ |
| Common Stock | | | | | 12,500 | I | by Trust 2 ⁽⁴⁾ |

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

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SEC 1474
(9-02)

Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned
(e.g., puts, calls, warrants, options, convertible securities)

| 1. Title of Derivative Security (Instr. 3) | 2. Conversion or Exercise Price of Derivative Security | 3. Transaction Date (Month/Day/Year) | 3A. Deemed Execution Date, if any (Month/Day/Year) | 4. Transaction Code (Instr. 8) | 5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4, and 5) | 6. Date Exercisable and Expiration Date (Month/Day/Year) | 7. Title and Underlying Security (Instr. 3 and 4) | |
|--|--|--------------------------------------|--|--------------------------------|---|--|---|--------------|
| | | | | Code | V (A) (D) | Date Exercisable | Expiration Date | Title |
| Incentive Stock Option (right to buy) | \$ 0.58 | 12/15/2006 | | M | 5,000 | 01/14/2000 ⁽⁵⁾ | 11/14/2010 | Common Stock |
| Incentive Stock Option (right to buy) | \$ 1.2 | | | | | 07/10/2002 ⁽⁶⁾ | 07/10/2012 | Common Stock |
| Incentive Stock Option (right to buy) | \$ 1.2 | | | | | 05/21/2003 ⁽⁷⁾ | 05/21/2013 | Common Stock |
| Incentive Stock Option (right to buy) | \$ 2 | | | | | 12/18/2003 ⁽⁸⁾ | 12/18/2013 | Common Stock |
| Incentive Stock Option (right to buy) | \$ 6.59 | | | | | 04/11/2005 ⁽⁹⁾ | 04/11/2015 | Common Stock |
| Incentive Stock Option (right to buy) | \$ 7.15 | | | | | 03/01/2006 ⁽¹⁰⁾ | 03/01/2016 | Common Stock |
| Non-Qualified Stock Option (right to buy) | \$ 1.2 | | | | | 07/10/2002 ⁽⁶⁾ | 07/10/2012 | Common Stock |
| Non-Qualified Stock Option (right to buy) | \$ 2 | | | | | 12/18/2003 ⁽⁸⁾ | 12/18/2013 | Common Stock |
| Non-Qualified Stock Option (right to buy) | \$ 7.15 | | | | | 03/01/2006 ⁽¹⁰⁾ | 03/01/2016 | Common Stock |

Reporting Owners

| Reporting Owner Name / Address | Relationships | | | |
|---|---------------|-----------|-----------|-------|
| | Director | 10% Owner | Officer | Other |
| Blum Robert I 280 EAST GRAND AVENUE SOUTH SAN FRANCISCO, CA 94080 | | | President | |

Signatures

By: Sharon Surrey-Barbari For: Robert I. Blum
12/18/2006

__Signature of Reporting Person Date

Explanation of Responses:

- * If the form is filed by more than one reporting person, *see* Instruction 4(b)(v).
- ** Intentional misstatements or omissions of facts constitute Federal Criminal Violations. *See* 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).
- (1) The exercise reported in this Form 4 were effected pursuant to a Rule 10b5-1 trading plan adopted by the reporting person on November 17, 2005.
- (2) The sales reported in this Form 4 were effected pursuant to a Rule 10b5-1 trading plan adopted by the reporting person on November 17, 2005.
- (3) Shares held by The Bridget Blum 2003 Irrevocable Trust.
- (4) Shares held by The Brittany Blum 2003 Irrevocable Trust.
- (5) This option is immediately exercisable upon grant and shall vest as to 25,000 shares on 11/14/00 and the balance of 87,500 divided into equal monthly installments thereafter such that the option shall be 100% vested on 11/14/05.
When the ISO and NQ dated 07/10/02 are combined for a total grant of 150,000 shares, the option is immediately exercisable upon grant and shall vest as to 2,500 shares on 04/15/02 and the balance of 147,500 divided into equal monthly installments thereafter such that the option shall be 100% vested on 03/15/07.
- (7) This option is immediately exercisable upon grant and shall vest as to 781 shares on 04/01/03 and the balance of 36,719 divided into equal monthly installments thereafter such that the option shall be 100% vested on 03/01/07.
When the ISO and NQ dated 12/18/03 are combined for a total grant of 141,925 shares, the option is immediately exercisable upon grant and shall vest as to 2,365 shares on 01/18/04 and the balance of 139,560 divided into equal monthly installments thereafter such that the option shall be 100% vested on 12/18/08.
- (9) This option shall vest and become exercisable as to 45,000 shares divided into equal monthly installments such that the option shall be 100% vested on 03/01/2009.
- (10) When the ISO and NQ dated 03/01/2006 are combined for a total grant of 100,000 shares, the option shall vest and become exercisable as to 100,000 shares divided into equal monthly installments such that the option shall be 100% vested on 03/01/2010.

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, *see* Instruction 6 for procedure. Potential persons who are to respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB number.